
The Public Health Conference on Records and Statistics

meeting jointly with

The American Association for Vital Records and Public Health Statistics

HIGHLIGHTS OF THE

15TH

NATIONAL MEETING

This report was prepared by Margery Cunningham. Tearsheet requests to Scientific Information Branch, National Center for Health Statistics, Health Resources Administration, Room 8-20, Parklawn Building, 5600 Fishers Lane, Rockville, Md. 20852.

EVERY TWO YEARS the National Center for Health Statistics hosts a meeting of registrars and health statisticians from the official health agencies across the country. These gatherings constitute the biennial meetings of the Public Health Conference on Records and Statistics, which are recognized as the principal national meetings for workers in vital records and health statistics in the United States.

The fifteenth national meeting took place in Washington, D.C., June 16-19, 1974. The theme

of this year's conference was the Cooperative Health Statistics System, a developing coalition among Federal, State, and local governments whose aim is to produce comparable and uniform health information and statistics.

This year's meeting, the largest ever, attracted some 700 participants. In addition to people from official health agencies at all levels of government, the group included representatives of such diverse interests as insurance executives, computer program analysts, hospitals, nursing homes, medical record consultants, the faculties of schools of medicine and public health and of departments of biostatistics and sociology, the professional organizations of health-related practitioners, and the legal profession. Also in attendance were 18 foreign participants from six countries.

At the first plenary session, Theodore Cooper, MD, Deputy Assistant Secretary for Health, wel-

comed the conference on behalf of the Secretary of the Department of Health, Education, and Welfare.

Reaching the goal of maintaining and improving the health status of the people, he said, requires substantial expansion of health data beyond those now available. First, new data "must be comprehensive, reflecting current health problems, utilization of services, availability of resources, and health trends. Second, data must be in sufficient geographic detail to permit planning for and assessment of changes at all geopolitical levels—national, State, and local."

Cooper described the Cooperative Health Statistics System as a data system that can serve as the basis for effective planning at all levels of government and for all areas of the country. He listed Federal health programs and proposed legislation that will create additional demands for health data. In the absence of a program such as this cooperative system, Cooper pointed out, various agencies at different government levels would need to develop their own data bases, and major duplication and waste would result.

Eliminating shortages of the kind of statistical information that is valid and meaningful to policy-makers is one of the Department's most important objectives for the coming years, he said.

Next Steps for the Cooperative System

Philip M. Hauser, PhD, professor of sociology and director of the Population Research Center at the University of Chicago, made the opening presentation, "Next Steps in the Development of Vital and Health Statistics."

Hauser listed the seven components of the system: vital statistics; manpower statistics; health

facilities statistics; hospital care statistics; health interview statistics; ambulatory care statistics; and long-term care statistics. But missing, he said, is a loom to weave the mountain of uncoordinated, unintegrated, unanalyzed health statistics into a meaningful fabric for purposes of policy and program formulation, an idea that was echoed by other speakers later in the meeting.

Hauser discussed briefly the recommendations of the Committee to Evaluate the National Center for Health Statistics (1), of which he was chairman. The first recommendation, he said, calls for development of a health accounts system with the objective of coordinating programmatic and general purpose statistics to provide a comprehensive basis for planning, administering, and evaluating health care in the United States, in both the public and private sectors. A health accounts system is described as consisting of inputs of resources (measured in dollars, manpower, facilities, and service) and outputs of health status (measured by mortality, disability, and ability to function).

Turning to the future development of the cooperative system, Hauser said that as a first step we must set in motion the weaving of the fabric that will put together the multitude of isolated facts that go separately to units of the health industry. Initially this means seeking data integration, as the committee recommended.

Step No. 2, Hauser said, is the recognition of socioeconomic epidemiology. He cited an American Public Health Association monograph, "Differential Mortality in the United States, A Study in Socioeconomic Epidemiology" (2). The study described therein, he said, convinces him that future improvements in mortality in the United

Delegates to the Public Health Conference on Records and Statistics attended many sessions such as this one on long-term care statistics





States will depend more on dealing with the socio-economic factors associated with mortality than on anything the biomedical profession can do.

Major Issues Facing Health Statisticians

The next speaker was Edward B. Perrin, PhD, director of the National Center for Health Statistics, whose subject was "Developing a Coordinated Health Statistics System for the Nation."

Discussing the major issues which face health statisticians, he stressed the importance of accurate and timely publication of baseline information and of the rapid release of the analytical results of surveys and censuses. The Center should continue as a collector of baseline data while at the same time expanding further its analytical activities. He referred particularly to cross data system analysis, which would permit relating health examination data and vital statistics, for example, and to the relationship of those systems to such material as data on hospital discharges and ambulatory care.

A second major issue, Perrin said, is the integration of programmatic and general purpose data, as was stressed by Hauser. It will be necessary, Perrin pointed out, to integrate the data we have traditionally collected with those which will be generated by a national health insurance scheme. He said the Center is working with officials of the Department to effectively harness the tremendous information potential in a national health insurance program.

The third major issue he sees is the need to pay a great deal of attention to the collection of data at the State and local levels.

Perrin reported that the Secretary of Health, Education, and Welfare has appointed an advisory committee on the cooperative system. Composed of representatives from the States and local areas, universities, and a range of professions, it will afford the National Center for Health Statistics a needed input, he said.

He praised the Committee to Evaluate the National Center for Health Statistics and discussed some of the actions that have been taken to implement its recommendations. With regard to its first recommendation, for the setting up of

a system of health accounts, Perrin said that the man whose idea it was, Dr. Paul Densen of Harvard, is now working on a definition of health accounts. The Committee's second recommendation, for the creation of an administrative structure providing line authority for data collection, has been put into effect.

The third recommendation called for fixing the primary responsibility for coordinating health statistics activities within the Department of Health, Education, and Welfare. That has been accomplished, Perrin said, by establishing a data policy committee in the office of the Assistant Secretary for Health. This committee is made up of representatives of all the HEW health agencies, the Social Security Administration, and the Social and Rehabilitation Service. It is chaired by the NCHS director.

Vital Statistics

"A Model for the Cooperative System—Revision of Vital Statistics Standard Certificates" was the topic of a presentation by Robert A. Israel, associate director for operations, National Center for Health Statistics.

Israel reviewed the history of the vital statistics system, expressing the belief that the process by which the U.S. standard certificates of vital events are revised represents an important contribution to the thinking in regard to setting up the Cooperative Health Statistics System. He said that the vital statistics system has exhibited several characteristics that typify the development of other components of the cooperative system—the cooperative aspect itself, the need for and establishment of a basic data set and standards, and geographic growth so as to ultimately produce statistics covering the entire nation.

As to the specific mechanisms and procedures used in revision of the standard certificates, he said that first of all consideration needs to be given to a scheduled periodic review of the contents of these basic data sets.

Second, in any revision of the basic items, account must be taken of the needs of a wide range of users of the data. Using the 1968 revision as an example, Israel described the consultations that took place with appropriate individuals and organizations, followed by drafts, more consultations, redrafts, and so forth.

Several aspects of the revision process have relevance to the establishment of the cooperative

system, Israel said. First, no data set should be developed without a mechanism for periodic review, evaluation, and necessary revision.

Second, in any component of the system in which there are many different users and producers of the data, it is most advantageous to give those agencies and organizations an opportunity to provide input into the preparation or revision of the minimum basic data set. Divergence of opinion can be expected, but those whose point of view is not accepted should be satisfied that they have had an opportunity to be heard.

Third, Israel stressed the benefits to be gained when a development process proceeds under the guidance of a broad-based public advisory group rather than a single agency. Fourth, he said, the method of making final decisions cannot always be democratic; sometimes administrative necessity rather than a "vote" must govern.

Second Plenary Session

"The Cooperative System—Meeting the User's Needs" was the subject of the second plenary session. The meeting was chaired by Karl D. Yordy, senior program officer of the Institute of Medicine, National Academy of Sciences, Washington, D.C.

Yordy noted that the speakers in this second session were not primarily statisticians but rather included a pediatrician, the medical director of a medical care foundation, a business executive, and the director of the Center for Health Services Research and Development of the American Medical Association.

"In the sense," he said, "of the 'we-they' dynamics of this kind of conference, the 'we'—including myself—are the 'they.'" We and they, he added, are part of a new era of health statistics characterized by changes which lead to new demands and new interests in health statistics on the part of many persons in policy-making positions who previously would have had little interest in them.

In the political context in which health statistics activities exist, there are still many gaps in communication, Yordy noted. Further, the kinds of issues that arise in implementing and further conceptualizing the cooperative system are dimly perceived by most of those who wield influence in the political context.

Among specific issues likely to arise in this political context, Yordy suggested, would be the development of a long-range strategy, which will need political recognition and a constituency. This will probably not be a "first order" constituency—one that views health statistics as of first importance. Rather, it will consist of people whose interests are in other things but who then see that health statistics are necessary to achieving their objectives.

A serious problem, stated Yordy, is the state of the art. Despite the progress in producing data on many aspects of health activity, the translation of those data into guidance for decision making requires additional steps, including analysis. Also, major conceptual problems have not yet been solved, Yordy said, and he mentioned the difficulty of measuring health status and of

John L. Pendleton, chief, Cooperative System's Technical Assistance Branch, NCHS, points out the States participating in the Cooperative Health Statistics System





trying to relate the process of care to outcomes.

Under the heading of general political problems, Yordy noted that although the cooperative system will operate in the context of Federal-State-local relationships, those relationships are far from clear. For example, local jurisdictions sometimes want to relate directly to the Federal Government rather than to go through the State.

New Health Manpower Data

Henry S. Mount, chief of the Health Manpower Statistics Branch, Division of Health Manpower and Facilities Statistics, National Center for Health Statistics, made the keynote presentation to a session on health manpower data systems.

Starting this year, he said, data on a variety of topics are to be collected through cooperative arrangements similar to those long established for vital statistics. Among the new areas being covered is health manpower, and initially data will be collected on 13 health-related occupations.

One reason for selecting these 13 occupations is that the people in them require the greatest amount of lead time to produce or train; thus, all levels of government need to have information about them. Also, they are the most accessible, each of them being licensed in 49 or more States. For the most part, information can be collected through a licensure attachment.

The 13 occupations are doctors of medicine and osteopathy; nurses, both registered and licensed practical or vocational; dentists and dental hygienists; chiropractors; podiatrists; pharmacists; physical therapists; veterinarians; and nursing home administrators.

In stage 1 of the health manpower data system, the limited amount of data that now exist for the 13 occupations will be collected and data handling techniques will be devised; in stage 2 a minimum data set will be used as a licensure attachment. Subsequent stages, not yet well defined, could include the expansion of coverage, the collection of specialized data on particular topics or groups, and so forth.

The primary purposes of the minimum data set are standardized content from all the participants in the system, standardized definitions, and data that will be comparable across geographic areas and geographic boundaries and between occupations. Eventually the data will provide time series and changes as they occur, thus showing trends. For States and localities, the data will furnish information for monitoring and planning.

Mount described the development of the basic data set, from the wording of a draft to its distribution and the solicitation of comments from groups and individuals.

The items receiving the greatest number of comments, he said, were six: multiple licensure—expand to include States in which the persons are licensed; name of the school of graduation; race or color; ethnic origin; primary occupation of specialists—expand the list of specialists; and form of employment.

In addition to commenting on the draft, respondents had suggestions for new items to be added. Among those frequently mentioned were board certification or eligibility; income or salary data; more information on training; reasons for inactivity among the inactive population; place of birth; and information about productivity.

Mount noted that there are many factors to weigh before an item can be included, excluded, or modified in the final minimum data set. He said that whatever is decided now is subject to modification later because of operational procedures and the interests of all the people concerned—so that this is only the beginning for the minimum data set on health manpower.

Long-Term Care Data

In the keynote address at a session on long-term statistics, Mrs. Beverlee A. Myers, deputy commissioner of medical assistance, New York State Department of Social Services, discussed "Guidelines and Principles for Long-Term Care Statistics."

More than in other areas, she said, statistics in the area of long-term care need to describe the population base in terms of social, economic, psychological, and behavioral characteristics; the range of environments in which care is given in social-psychological as well as medical terms; and the interaction between patient and environment as a care process, rather than as a cure process.

Long-term care data are needed and used in

two dimensions, micro and macro, Myers pointed out. The micro dimension deals with the individual and his interaction with the care environment. It requires data on and derived from assessment of individual patient characteristics and needs; of individual environments in which care might be given; and of the process of care when the patient interacts with the environment. It provides a basis for decisions on individual patient placement and care and for evaluation of the effects of care modalities on patient status.

The Patient Classification System for Long-Term Care (3) [this manual is described on page 585. *Ed.*], based on the work of Paul Densen and associates, affords a uniform way of describing patient characteristics in terms of both socioeconomic and medical elements, Myers stated. The psychosocial factors need to be strengthened, and the system itself extensively field-tested, but it represents a major breakthrough.

The survey forms used to assess compliance with Federal standards for Medicare and Medicaid, she said, provide uniform, standardized ways of describing certain care environments—skilled nursing facilities, intermediate care facilities, and home health agencies. Public Law 92-603 makes these forms publicly available, and they should be evaluated for use in the patient placement process. This suggestion illustrates a basic principle—that any data collected should serve as many purposes as possible.

Uniform language to describe the care process is a requirement which is not now covered. Myers expressed the belief that this is needed for assessing appropriate utilization and the quality and effectiveness of care and for making payments for services. As a basic principle, she said, these descriptors should be uniform and standardized so that data can be aggregated for the macro level.

At the macro level, data are needed for planning services and beds, evaluation of the long-term care system, budget and expenditure planning, regulation of the industry, and research. The aggregated data are essentially programmatic. Baseline data are needed, also, for a denominator. The surveys of health, facilities, and cost conducted by the National Center for Health Statistics are examples of the baseline data required. Obviously, Myers commented, the language used in baseline statistics must conform with or at least be compatible with that used in the programmatic

statistics. Both the baseline and the program data should be more timely, and the baseline data should be relevant to smaller geographic areas.

Both the recording and reporting of data are carried out at the point of care, but everything recorded should not be reported, she stressed. As a basic principle, anything required to be reported should be useful to the reporter. Otherwise, he has no incentive for timely, accurate, and reliable reporting.

Reporting formats should be uniform to lessen the impact on the reporter and permit easier organization in the aggregation of the data.

The Cooperative Health Statistics System, Myers pointed out, is the appropriate vehicle for collecting and analyzing the macro and baseline data. Other programs will be concerned with analysis, but efficiency dictates a decentralized vehicle to coordinate the sources of data, to assure uniformity at the micro and macro levels, and to make the data available for the multiple purposes envisioned.

Hospital and Health Data

As chairman of a session on the hospital's role as both a provider and user of data, James P. Cooney, PhD, director of the Health Services Research Center of Chicago, made the point that to obtain valid and reliable information the user must establish a reciprocal relationship with the provider, in this case the hospital.

“Buying data has only a limited potential in achieving comprehensiveness, validity, and reliability,” he said. “Internal usability for the provider of the information will do more toward solving your problems of data quality and quantity than most other solutions.”

L. J. Danehy, director of the Rochester (N.Y.) Hospital Council, reiterated this idea. He said that hospitals now collect most of the information called for in the uniform hospital discharge data set. These data, in and of themselves, are probably of little help to a hospital, he thought. But the hospital can integrate them with other information, producing something useful to the particular institution.

State and Local Health Interviews

The session on “The Use of a Health Interview as a State or Local Planning Tool” was chaired by Robert B. Pearl, former chief of the



Social Statistics Branch, Office of Management and Budget, Executive Office of the President. He traced the history of health interview surveys and noted some reservations about their use at the local level—the great difficulty of mounting and operating them and the costs involved.

One of the speakers at this session was Jacob J. Feldman, PhD, a professor in the Department of Biostatistics, School of Public Health, Harvard University, who talked about the types of statistical information which can and cannot be measured adequately through health interview surveys.

He mentioned various sources of morbidity and mortality data—deaths or hospital discharges, insurance claims, Medicare data, ambulatory care records. But these data collection methods represent only the tip of the iceberg, he said. The mortality data are complete, but they do not reflect the morbidity situation of the community; and the other measures relate only to the illnesses that are attended.

Health interview surveys, however, report unattended as well as attended morbidity and produce data on unmet needs, he said. Also, they permit one to relate utilization to need on a one person basis and to find out in what segments of the population there is particularly great imbalance between utilization and need; they also facilitate cross-tabulation of personal and social characteristics with morbidity patterns.

Feldman discussed some of the unsolved problems that plague health interview surveys: how to translate morbidity measures into volume of needs for services; the fact that interviews do not produce good diagnostic information; and under-reporting—an illness that does not affect the person's life very much too often is not reported.

Nevertheless, health interview surveys are the preferred or only method of obtaining some types of data, Feldman said. Examples are the health insurance that people have; environmental information—to determine the impact of pollution, one needs to know where people spend their time and how much time; health practices, such as smoking, dietary patterns, use of medication, and

so forth; accident data; accessibility of medical care—how long a person must wait for an appointment with a doctor and how far he must travel to get there.

Ambulatory Care Statistics

As chairman of the session on “Ambulatory Care Statistics,” Robert E. Dedmon, MD, president of the Twin City Clinic, Neenah, Wis., discussed ambulatory care records from a practicing physician's point of view.

First, he said, the diagnostic terminology physicians are used to is often not practical in the ambulatory care setting—but relating to the patient's situation in his own terms can create problems in terminology and classification. Second, abbreviations should be standardized, and there should be a requirement that the records be legible.

Another difficulty concerns the visibility on the patient's chart of all the major diagnoses, especially when the patient goes from one clinic to another. Unless all such diagnoses are reported with sufficient visibility, for example, a patient could receive a drug he would not otherwise be given.

Dedmon mentioned also the appropriate utilization of laboratory evaluation, the proper notation of the patient's disposition, the problem of misdiagnosis, and the proper identification of the patient's allergies to drugs.

Continuity of care is difficult when several physicians see a patient, Dedmon noted. The record must be sufficiently complete for all physicians in the care system to ascertain rapidly the patient's situation. There are also legal considerations. What would the complainant's attorneys or the defense attorneys say if they looked at the chart?

Finally, he said, the solutions to ambulatory care problems must be directed toward the delivery of care at its best, but responsibility for this in the record area rests with the entire team, not just the physician.

Carmalt B. Jackson, Jr., MD, San Antonio, Tex., reported on the new uniform minimum data set for ambulatory care, which is the work of a technical consulting panel of the United States National Committee on Vital and Health Statistics.

In the panel's report (4), two types of purposes are noted that are served by the maintenance of ambulatory medical care records. One

is the improvement of ambulatory care, and the other is a variety of management, planning, education, and research uses which can be served only when data have been abstracted from records and analyzed.

The panel said that ambulatory care records, no matter how simple, will consist of three informational components:

1. Information that identifies and characterizes the patient.
2. Information that identifies and characterizes the provider.
3. Information that identifies and characterizes each "encounter" between patient and provider.

An encounter is a face-to-face contact between a patient and provider who, at the time of the encounter, has the primary responsibility for assessing and treating or managing the condition of the patient and who exercises independent judgment in the care of the patient.

Fortunately, Jackson said, many of the items of information which should be recorded in the interest of facilitating care of the patient are the same items needed for other purposes. This fact gives rise to the concept of the minimum basic data set.

Other Sessions

In a program on "Disease Classifications for What," panel members discussed the use of disease classifications as medical nomenclature, for storage and retrieval, for medical care statistics, and for medical care evaluation.

Speaking to the latter, Robert H. Brook, MD, medical officer in the Bureau of Health Services Research, Health Resources Administration, cited deficiencies in the present system from the point of view of the evaluation of medical care.

For purposes of evaluation, he said, the disease classification system needs to be modified so that it will be uniform across the country; it will contain an auditing mechanism to assure a reasonable level of reliability and validity of information; and it will incorporate within the classification scheme for a few selected diseases the factors by which patients with those diseases may be grouped into a more prognostically homogeneous category.

Additional concurrent sessions focused on the revision of standard certificates of births, deaths, fetal deaths, marriage, and divorce or annulment; the role of data in the assessment of the

quality of care; health facilities statistics; the application of interview techniques to issues in health economics; uses of health data in planning; the structural format of standard certificates; research on data collection mechanisms; and the transition to automation in State vital statistics processing (through the Cooperative Health Statistics System).

Meeting of AAVRPHS

As has been customary, the American Association for Vital Records and Public Health Statistics (AAVRPHS) held its national meeting in conjunction with the Public Health Conference on Records and Statistics. The association elected the following slate of officers for 2-year terms:

President, Irvin G. Franzen, Division of Registration and Health Statistics, Kansas State Department of Health; President-Elect, Vito M. Logrillo, director of Health Statistics, New York State; Vice President, John E. Brockert, director of the Bureau of Health Statistics, Utah State Division of Health; Secretary-Treasurer, Frederick L. King, chief of the Section of Administrative Services, Minnesota Department of Health.

Elected to the executive board were Robert T. Bailey, State registrar, Vital Statistics, Arkansas Department of Health, and Raymond D. Nashold, PhD, director of the Bureau of Health Statistics, Wisconsin Department of Health.

Everett H. Williams, Jr., chief of the Bureau of Vital Statistics, Division of Health, Florida Department of Health and Rehabilitative Services, remains on the board as immediate past president.

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